**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

WSOU Investments, LLC d/b/a Brazos Licensing and Development, Plaintiff, v. **NEC Corporation**, Defendant.	Case No.: 6:20-cv-00923-ADA Case No.: 6:20-cv-00924-ADA Case No.: 6:20-cv-00925-ADA Case No.: 6:20-cv-00926-ADA Case No.: 6:20-cv-00927-ADA **Jury Trial Demanded**

**DEFENDANT NEC CORPORATION'S RE-SUBMITTED
OPENING CLAIM CONSTRUCTION BRIEF**

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Abbreviation	Description
WSOU	Plaintiff WSOU Investments, LLC d/b/a Brazos License and Development
NEC	Defendant NEC Corp.
The Parties	NEC and WSOU
'103 patent	U.S. Patent No. 7,577,103
'398 patent	U.S. Patent No. 7,885,398
'017 patent	U.S. Patent No. 8,041,017
'213 patent	U.S. Patent No. 8,103,213
'918 patent	U.S. Patent No. 9,065,918
The Asserted Patents	Collectively, the '103 patent, the '398 patent, the '017 patent, the '213 patent, and the '918 patent
MPF	means-plus-function
POSITA	Person Of Ordinary Skill In The Art

Emphasis added unless indicated otherwise.

I.   INTRODUCTION

NEC Corporation ("NEC") presents its proposed constructions for eighteen claim terms.[1]

This dispute involves five different cases, collectively asserting a total of five unrelated patents.

Many claim terms of these patents are indefinite. This includes terms that recite "means

for" performing certain functions, but which lack any clearly-linked, sufficient specification

structure as required by pre-AIA 35 U.S.C. § 112, ¶ 6. This also includes terms that, while not

falling under § 112, ¶ 6, simply lack any plain and ordinary meaning to a POSITA, and are

indefinite due to the lack of guidance and reasonable specificity from the specification. Yet

other claim terms, while definite, are much narrower than WSOU espouses, particularly in light

of the specification, prosecution history, and Federal Circuit precedent.

During claim construction discovery, WSOU's proposed constructions have been a

moving target. Perhaps, though, it is more accurate to refer to WSOU's lack of proposed

constructions. WSOU originally took the position that **no** claim terms required construction

from **any** of its five asserted patents—including even those reciting "means for" performing

specific functions under § 112, ¶ 6. (*See* Ex. 9.)[2] But, WSOU eventually retreated, conceding

that these terms were governed by § 112, ¶ 6, but identifying only scant corresponding structure.

(*See* Ex. 10, at 16–22, 26–30; Ex. 11, at 23–32, 44–52 (conceding that these terms were

governed by § 112, ¶ 6 while relying on the same, previously identified structure).) Then,

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[1] On September 22, 2021, the parties received an email from the Court's clerk indicating that NEC's original claim construction brief (Dkt. 29) would be struck in its entirety and instructing NEC to submit a new brief addressing the 14 claim terms that Plaintiff acknowledged to be MPF terms along with four additional terms. Accordingly, NEC respectfully submits this brief addressing those 18 terms. NEC is concurrently submitting a Motion for Reconsideration (Dkt. 37 in Case Nos. 6:20-CV-923-ADA, -924, -925, and -927; Dkt. 36 in Case No. 6:20-CV-926-ADA) in which NEC respectfully requests that the Court reconsider its decision (Dkt. 33) striking NEC's original brief.

[2] "Ex. __ " refers to exhibits attached to the Declaration of Christopher A. Buxton, filed herewith.

changing its tactics again, WSOU purported to "supplement" its proposed constructions by adding lengthy new specification citations for § 112, ¶ 6 terms. (*See* Ex. 12.) WSOU's proposed constructions for non-MPF terms also morphed, from asserting "plain and ordinary" meanings requiring no construction, to providing alternative constructions or "explanations" about what the supposed unconstrued plain and ordinary meaning would be. (*See* Ex. 11, at 1–2, 12, 14, 53.)

Setting aside WSOU's ever-changing, and likely still unsettled, claim construction positions, NEC's proposals should be adopted. Those proposals accurately reflect the meaning of the claim terms to a POSITA when viewed in light of the claim language, the specification, and the prosecution history. NEC's proposals also accurately reflect when there simply is no such discernable meaning due to indefiniteness. NEC therefore respectfully requests that the Court adopt its proposed constructions for the reasons set forth herein.

II.   APPLICABLE LAW

A.   General Principles

"[T]he words of a claim are generally given their ordinary and customary meaning … to a person of ordinary skill in the art … at the time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (internal citation and quotation omitted). "Importantly, the person of ordinary skill in the art is deemed to read the claim term … in the context of the entire patent, including the specification." *Id.* at 1313. Patent claims "must be read in view of the specification, of which they are a part. … [T]he specification is always highly relevant … . Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Id.* at 1315 (internal citations and quotation omitted).

B.   **Means Plus Function ("MPF") Claim Terms[3]**

An element may be expressed in MPF language, governed by pre-AIA 35 U.S.C. § 112,

¶ 6.[4] Courts apply a two-step approach to construe an MPF limitation. *Med. Instrumentation &*

Diagnostics Corp. v. Elekta AB, 344 F.3d 1205, 1210 (Fed. Cir. 2003). The first is to identify the

function. *Id.* The second is to identify the corresponding structure in the specification. *Id.* The

specification must clearly link a corresponding structure to the claimed function. *Id.*; *see also*

Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc., 248 F.3d 1303, 1312–14 (Fed. Cir. 2001);

B. Braun Medical, Inc. v. Abbott Labs., 124 F.3d 1419, 1425 (Fed. Cir. 1997). The patentee

bears the burden of establishing the requisite clear linking. *Biomedino, LLC v. Waters Techs.*

Corp., 490 F.3d 946, 949 (Fed. Cir. 2007).

C.   **Indefiniteness**

"The specification shall conclude with one or more claims particularly pointing out and

distinctly claiming the subject matter which the applicant regards as his invention." Pre-AIA

35 U.S.C. § 112, ¶ 2. "[A] patent is invalid for indefiniteness if its claims, read in light of the

specification … and the prosecution history, fail to inform, with reasonable certainty, those

skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572

U.S. 898, 901 (2014). In so holding, the Supreme Court overturned the Federal Circuit's earlier,

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[3] The Court instructed the Parties to limit this briefing to the 14 claim terms that Plaintiff acknowledged to be MPF terms along with four additional terms. However, NEC's understanding is that unless rendered moot, the law requires all §112, ¶ 6 terms, including those terms that the Parties dispute to be governed by § 112, ¶ 6, to be eventually construed by the Court. *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 1360 (Fed. Cir. 2000); *Personalized Media Commc'ns, LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 702 (Fed. Cir. 1998). As a result, and to avoid any assertion of waiver or forfeiture by WSOU, NEC hereby reserves the right to raise these additional claim terms for construction prior to trial.

[4] The applications for all five Asserted Patents were filed before March 16, 2013, making each patent subject to pre-AIA § 112, ¶¶ 2 and 6. Nonetheless, this brief may also refer to post-AIA 35 U.S.C. § 112(b) and (f) for indefiniteness and MPF issues, respectively.

more stringent "insolubly ambiguous" indefiniteness standard. *Id.* For an MPF claim term, definiteness requires the specification to clearly link corresponding, sufficient structure to the claimed function; further, after-the-fact expert testimony cannot act as a substitute for this clear linking requirement. *See Elekta AB*, 344 F.3d at 1211; *B. Braun*, 124 F.3d at 1424–25; *Dyfan, LLC v. Target Corp.*, 2020 WL 8617821, at *3 (W.D. Tex. Nov. 25, 2020).

III.   EXPERT EVIDENCE

For those claim terms where expert testimony will assist the Court, including for certain terms that are indefinite or subject to pre-AIA 35 U.S.C. §112, ¶ 6, NEC submits the expert declaration of Dr. Matthew Shoemake as Exhibit 1 to this brief (hereafter, "Shoemake Decl.").[5]

IV.   U.S. PATENT NO. 7,577,103 (CASE NO. 6:20-CV-923-ADA)

The Parties do not here dispute any claim terms in the '103 patent. Further, NEC sought early resolution of WSOU's infringement assertion of the '103 patent because <u>sales of NEC's accused product have been *de minimis*, totaling $18,400, with no future sales anticipated</u>. (*See* Ex. 13.) NEC mentions this here not because it expects the Court to take any action now, but to demonstrate that NEC has attempted to narrow the disputes, and also minimize the number of claim terms for construction across the five cases. Unfortunately, WSOU has not dismissed or otherwise agreed to resolve this case despite the lack of sales.

V.   U.S. PATENT NO. 7,885,398 (CASE NO. 6:20-CV-924-ADA)

Here, the Parties dispute the meaning of one term in the '398 patent. NEC asked WSOU to dismiss its assertion of the '398 patent because <u>there have not been any U.S. sales of the accused NEC product</u>, which should eliminate any need to construe this term. (*See* Ex. 14.) Unfortunately, WSOU has refused to dismiss this case. NEC must therefore present this term for

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[5] For purposes of this Re-Submitted Brief, Ex. 1 was updated to address the terms briefed herein.

construction, in the event that WSOU later attempts to accuse other NEC products.

WSOU asserts claims 1, 10, and 13. The '398 patent generally relates to communicating information over a network from one node to another. Figure 2 of the '398 patent, reproduced below, shows an example of a four-node network 20.
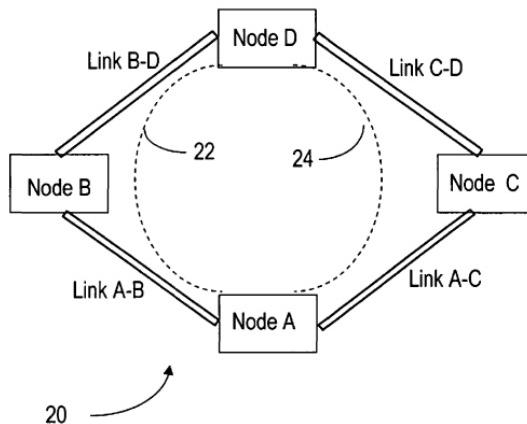
FIGURE 2

In this example, originating Node A sends information to destination Node D. (*See* '398 patent at 6:15–18.) This can occur through two possible routes, "namely, a first route R1 denoted 22 along links A-B and B-D, and a second route R2 denoted 24 along links A-C and C-D." (*Id.* at 6:38–45.) The '398 patent relates to determining different route performance values for different possible routes such as R1 and R2 above, and then "load balancing" information that is sent across one or both of these different routes from Node A to Node D. (*See id.* at 6:49–8:5; *see also* Shoemake Decl. ¶¶ 43–44, 50.)

A.   **"Service category criterion" (claims 1, 10, and 13)**

NEC's Construction	WSOU's Construction
Indefinite	No construction necessary – plain and ordinary meaning

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"Service category criterion" appears in each '398 patent asserted claim. Thus, if this term is indefinite, all asserted claims are invalid. This term appears in three similar limitations:

> [1.d] determining a third route performance value for each possible route, for a call attribute corresponding to a *service category criterion* ('378 patent at 9:44–46); and
>
> [10.e] and [13.e] a third aggregated attribute calculation unit that determines a third route performance value for the list of possible alternate routes for a call attribute corresponding to a *service category criterion* ('378 patent at 10:53–56 and 12:1–4).

WSOU asserts that no construction is required. This term, however, is indefinite because "service category criterion" does not have any plain and ordinary meaning to a POSITA, and the specification of the '398 patent does not provide or explain any such meaning.

NEC's expert Dr. Shoemake explains that there is no plain and ordinary meaning of "service category criterion," including in the context of the '398 patent. (Shoemake Decl. ¶ 48.) This is both because there is no plain and ordinary meaning of "service category," nor is there any such meaning for "criterion" of a service category. (*Id.*) As a result, a POSITA simply would not understand the scope and meaning of "service category criterion" in the patent's claims. During claim construction discovery, WSOU did not identify technical dictionaries, treatises, or other authoritative sources purporting to ascribe any plain and ordinary meaning to this term. (*See* Ex. 10, at 2–3.) Instead, the only extrinsic evidence WSOU identified is a possible forthcoming declaration of its expert Dr. Polish. (*Id.*) Regardless of what Dr. Polish may say, his testimony cannot overcome the lack of any explanation of the meaning of "service category criterion" in the specification.

As explained by Dr. Shoemake, the specification does not explain or otherwise define the meaning of "service category" or a "criterion" for such a category. (*See* Shoemake Decl. ¶¶ 49–52.) Instead, the specification uses the phrase "service category criterion" as a tautology,

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assuming that a POSITA would simply understand or deduce what the phrase means. (*Id.*) As

an example, the specification states:

> A call is also defined by one or more attributes. An example of a
> user-specified call attribute (or a user-specified attribute) is the call
> priority, or *a call service category*, call bandwidth, etc.

('398 patent at 4:9–12.) Other than stating that a "call service category" may be user-defined,

the specification does not explain what is meant by a "service category" or a "criterion" for a

service category, or how a "service category criterion" is determined for different possible

routes. (Shoemake Decl. ¶¶ 49–50.) The same ambiguity is present wherever the '398 patent

mentions a call service category, making no mention of what qualifies as criterion or how to

determine them. (*Id.* (discussing '398 patent at abstract, 2:4–5, 5:35–36, 5:61–63, 6:5–14, and

7:63–8:5).) In sum, the specification does not add any meaningful information reasonably

informing a POSITA as to the meaning and scope of the claim term "service category criterion,"

as Dr. Shoemake further explains. (*Id.* ¶¶ 49–54.) The term is therefore indefinite.

VI.   U.S. PATENT NO. 8,041,017 (CASE NO. 6:20-CV-925-ADA)

WSOU asserts claims 1–3, 8–10, 16, 17, and 20. Three terms are disputed here:

"detecting means," "calling means," and "answer detecting means." Each is subject to § 112, ¶6.

Although initially asserting no construction is required (Ex. 10, at 6), WSOU now concedes that

these terms are subject to § 112, ¶6, and must therefore be construed, (Ex. 15). The disputed

terms appear in asserted claims 8–10 ("answer detecting means" appears only in claim 10).

The '017 patent relates generally to bridging a third party into an emergency call placed

by a calling party to a so-called Public Safety Answer Point (PSAP), *e.g.*, a 911 call center. (*See*

generally '017 patent at Abstract, 1:17–2:38.) The '017 patent states that when a distressed

person makes an emergency call, the person may have a physical or mental disability, be

language impaired, or otherwise be unable to effectively explain the emergency situation. (*Id.*)

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To ensure effective communications, the '017 patent states that "it would be advantageous …

whereby the assistance of one or more third parties could be automatically enlisted to help

overcome the communication barrier." (*Id.* at 2:30–34.) This is accomplished by a call bridge

system in which contact information for a third party previously provided by the distressed

person can be used later to bridge the third party into an emergency call. (*See id.* at, e.g., 2:42–

53.) Notably, the prior art already included call bridging systems allowing a third party to join

an emergency call, such as an E911 call to a PSAP. Thus, the '017 patent discloses and claims a

particular emergency call bridging system allegedly patentable over the prior art.

A. "Detecting means" (claim 8)

NEC's Construction	WSOU's Construction
Governed by 35 U.S.C. § 112, ¶ 6.	Governed by 35 U.S.C. § 112, ¶ 6.
Function: "detecting that the received first call is an emergency call"	Function: "detecting that the received first call is an emergency call"
Structure: For example, step 102 of Fig. 2, and the corresponding portions of the specification at 9:15-17, node 30 of Fig. 1 and the corresponding portions of the specification at 5:41-48, and equivalents thereof.	Structure/material/acts: For example, step 102 of Fig. 2, and the corresponding portions of the specification at 9:15-17, node 30 of Fig. 1 and the corresponding portions of the specification at 4:62-5:40 and[6] 5:41-48, and equivalents thereof.

Both Parties agree this term is governed by § 112, ¶ 6 and further agree on the claimed

function. WSOU's identification of alleged corresponding structure, however, is overbroad and

improperly includes structures or materials not clearly linked to the claimed function. "A

'structure disclosed in the specification is "corresponding" structure only if the specification or

prosecution history clearly links or associates that structure to the function recited in the claim.'"

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[6] Underlining reflects only differences from NEC's proposed structure. NEC originally
identified "the network access node serving the terminal used by the calling party, as disclosed at
5:37-48, and equivalents thereof," but conformed its proposal to simplify the issues for the court.

Digital Retail Apps, Inc. v. H-E-B, LP, 2020 WL 376664, at *3 (W.D. Tex. Jan. 23, 2020)

(Albright, J.) (quoting *Medtronic*, 248 F.3d at 1311).

In *Elekta AB*, the Federal Circuit declined to include "software" identified in the

specification as corresponding structure for converting images into a selected digital format

because "there is no evidence that [a POSITA] would perceive a clear link between software and

the [recited] function" based on the disclosure in the specification or prosecution history. 344

F.3d at 1216. Similarly, in *Medtronic*, the Federal Circuit declined to include as additional

corresponding structure multiple structures disclosed in the patent and "definitely capable of

performing the function recited" but nevertheless not clearly linked or associated to that

particular function by the specification or prosecution history. 248 F.3d at 1312.

Here, the Parties agree that the following is corresponding structure:

> Accordingly, when the terminal 10 is used to place an emergency
> call (e.g., by dialing 9-1-1 in the United States of America or
> another emergency telephone number or code as may be the case
> in other countries), the node 30 serving the terminal 10 recognizes
> the call as an emergency call, and the call is routed in the usual
> manner over the network 20 to a designated PSAP 40, e.g., one
> serving the geographic area in which the terminal 10 is located.

('017 patent at 5:41–48.) As this passage makes clear, it is the "node 30" that "recognizes the

call as an emergency call." Therefore, the corresponding structure for the detecting means is the

network access node serving the terminal used by the calling party.

WSOU's remaining specification cites are not clearly linked to the agreed function of

"detecting that the received first call is an emergency call." In particular, WSOU designates a

general description of terminal 10, network 20, and node 30 without any link to a "received first

call" or "detect[ing] that the received call is an emergency call." Nothing clearly links terminal

10 to "detecting that the received first call is an emergency call," and it would be nonsensical to

claim that the terminal placing the call also *receives* the call to detect that it is an emergency call.

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Moreover, while WSOU's extraneous disclosure describes certain embodiments of "network access node 30," it does not clearly link any particular aspect, component, or module of node 30 to the claimed function. Accordingly, this additional passage is not corresponding structure.

B.   "Calling means" (claim 8)

NEC's Construction	WSOU's Construction
Governed by 35 U.S.C. § 112, ¶ 6. Function: "automatically originating at least one second call associated with the reserved conference facilities from the node over the telecommunications network to at least one predetermined third party that is different than the calling party and the second party, <u>each third party being previously designated by the calling party along with suitable contact information for the corresponding third party in conjunction with a service feature provided to the calling party via the telecommunications network</u>"[7]	Governed by 35 U.S.C. § 112, ¶ 6. Function: "automatically originating at least one second call associated with the reserved conference facilities from the node over the telecommunications network to at least one predetermined third party that is different than the calling party and the second party"
Structure: For example, step 118 of Fig. 2, and the corresponding portions of the specification at 9:47-66, node 30 of Fig. 1 and the corresponding portions of the specification at 6:20-7:28, and equivalents thereof.	Structure/material/acts: For example, step 118 of Fig. 2, and the corresponding portions of the specification at 9:47-66, node 30 of Fig. 1, and the corresponding portions of the specification at 6:20-7:28, and equivalents thereof.

The Parties agree this term is governed by § 112, ¶ 6, but disagree on the claimed function. Specifically, NEC identifies the remainder of the claim limitation as the function, whereas WSOU omits the final clause underlined in the chart above. This language ascribes function that was added to the claims by amendment to secure allowance. WSOU's omission is

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[7] Underlining reflects only differences between the Parties' proposals. NEC originally identified "the network access node serving the terminal used by the calling party and stored contact information for the at least one predetermined third party, as disclosed at 6:36-41, 9:47-59, and equivalents thereof," as the associated structure but conformed its proposal to simplify the issues for the court.

improper, and NEC's proposed function should be adopted.

"[A] court may not construe a [MPF] limitation 'by adopting a function different from that explicitly recited in the claim.'" *JVW Enters., Inc. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1331 (Fed. Cir. 2005) (quoting *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999)). "In identifying the function of a [MPF] claim, a claimed function may not be broadened by ignoring the clear limitations contained in the claim language." *Lucent Techs., Inc. v. Extreme Networks, Inc.*, 367 F. Supp. 2d 649, 673 (D. Del. 2005) (citing *Lockheed Martin Corp. v. Space Sys./Loral, Inc.*, 249 F.3d 1314, 1324 (Fed. Cir. 2001), *judgment vacated on other grounds*, 535 U.S. 1109 (2002)). In *Lucent*, the plaintiff sought to drop the underlined portion from "means contained in said first node for receiving via an associated one of said links said message, <u>said message being originated by a third one of said nodes</u>." *See id.* The court declined, concluding the phrase was a "further limitation" on the claim. *Id.* at 674.

WSOU's omission of similar claim language here, "each third party being previously designated by the calling party along with suitable contact information for the corresponding third party in conjunction with a service feature provided to the calling party via the telecommunications network," improperly reads out of the claim a relevant limitation. By the plain language of WSOU's proposed function, the calling means acts to "automatically originat[e] at least one second call" to "at least one predetermined third party that is different than the calling party and the second party," but the clause WSOU omits reflects that the third party is "previously designated *by the calling party*."

Moreover, WSOU's omitted clause was added during prosecution to overcome an anticipation rejection. (Ex. 7, at 68–69, 73–74.) Indeed, the applicant argued that the "anticipation rejection … is clear error because the reference does not disclose or fairly suggest

the 'previously designated' limitation in the 'calling means' sub-element of the 'node' element

of claim 8." (*Id.* at 75.)   After narrowing the claim to overcome prior art, WSOU cannot now

seek a broader construction. *See, e.g.*, *Wang Labs., Inc. v. Mitsubishi Elecs. Am., Inc.*, 103 F.3d

1571, 1577–1578 (Fed. Cir. 1997) ("Prosecution history estoppel … preclud[es] a patentee from

regaining, through litigation, coverage of subject matter relinquished during prosecution of the

application for the patent.").

 WSOU's proposed function omits a limitation of claim 8, and improperly broadens the

claim's scope to recapture subject matter specifically disclaimed during prosecution.   NEC's

competing construction, however, does not ask this Court to "adopt[] a function different from

that explicitly recited in the claim," *JVW Enterprises*, 424 F.3d at 1331 (quoting *Micro*

Chemical, 194 F.3d at 1258), and should therefore be adopted.

  C. **"Answer detecting means" (claim 10)**

NEC's Construction	WSOU's Construction
Governed by 35 U.S.C. § 112, ¶ 6. Function: "determining whether or not the third party answers the second call" Structure: For example, step 120 of Fig. 2, node 30 of Fig. 1 and the corresponding portions of the specification at 9:60-61, and equivalents thereof.	Governed by 35 U.S.C. § 112, ¶ 6. Function: "determining whether or not the third party answers the second call." Structure/material/acts: For example, step 120 of Fig. 2, and the corresponding portions of the specification at 9:60-61 <u>and 10:4-6</u>, node 30 of Fig. 1 <u>and the corresponding portions of the specification at 7:8-:8:55</u>,[8] and equivalents thereof.

 Both Parties agree this term is governed by § 112, ¶ 6 and further agree on the claimed

function.   WSOU's identification of alleged corresponding structure, however, is overbroad and

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[8] Underlining reflects only differences from NEC's proposed structure. NEC originally
identified "the network access node serving the terminal used by the calling party, as disclosed at
9:60-61, and equivalents thereof," but conformed its proposal to simplify the issues for the court.

includes structures or materials not clearly linked to the claimed function.

Here, the Parties agree that the following is corresponding structure:

> Thereafter, at decision step 120, the node 30 detects or otherwise
> determines if the called third party answers the call.

('017 patent at 9:60–61), *i.e.*, it is the "node 30" that "detects or otherwise determines if the

called third party answers the call." Therefore, the corresponding structure for the detecting

means is the network access node serving the terminal used by the calling party.

The remainder of WSOU's specification citations are not clearly linked to the agreed

function. In particular, WSOU identifies two additional passages. First, WSOU cites:

> As illustrated in FIG. 2, if it is determined at step 120, that the call
> has been answered by the third party, then the process continues to
> step 124.

(*Id.* at 10:4–6.) This sentence, however, is in passive voice and discloses no structure for the

answer detecting means. The second passage WSOU cites contains nearly two columns of text,

but "determine" appears only three times, and each time as whether "some *determine* [*sic*] time

limit has not expired"—not "determining whether or not the third party answers the second call."

There is no clear link of this passage to the claimed function. *Cf. Bell N. Rsch., LLC v. Coolpad

Techs., Inc.*, 2019 WL 3766688, at *6 (S.D. Cal. Aug. 9, 2019). It contains nothing more than

vague references to whether the third party answers the call. (*See, e.g.*, '017 patent at 7:11–16

("Suitably, if the third party's line is busy or they do not answer, then the node 30 repeatedly

places the third party call until a desired result is achieved (e.g., the call is answered and/or the

third party is joined to the emergency call)….").) At most, this passage says node 30 may *place*

calls to successive third parties until one answers—it does not once identify or clearly link a

particular structure for "*determining* whether or not the third party answers the second call."

WSOU's proposal includes passages not clearly linked to the claimed function, and because the only corresponding structure is the network access node serving the terminal used by the calling party, WSOU's construction is overbroad and NEC's construction should be adopted.

VII.   U.S. PATENT NO. 8,103,213 (CASE NO. 6:20-CV-926-ADA)

WSOU asserts claims 1, 8, and 22–26 of the '213 patent. Section VII.A below first discusses two claim terms that are not subject to 35 U.S.C. § 112, ¶ 6. This includes one term that is indefinite and found in all asserted claims. Section VII.B below then discusses additional terms that are subject to 35 U.S.C. § 112, ¶ 6, and also indefinite. However, if the Court finds these asserted claims already indefinite due to the non-§ 112, ¶ 6 term of Section VII.A, then the Court may not need to address the § 112, ¶ 6 issues of Section VII.B.

The '213 patent generally relates to configuring two devices to communicate with each other by establishing a connection. An example of this process is shown in Figure 13.

FIG. 13
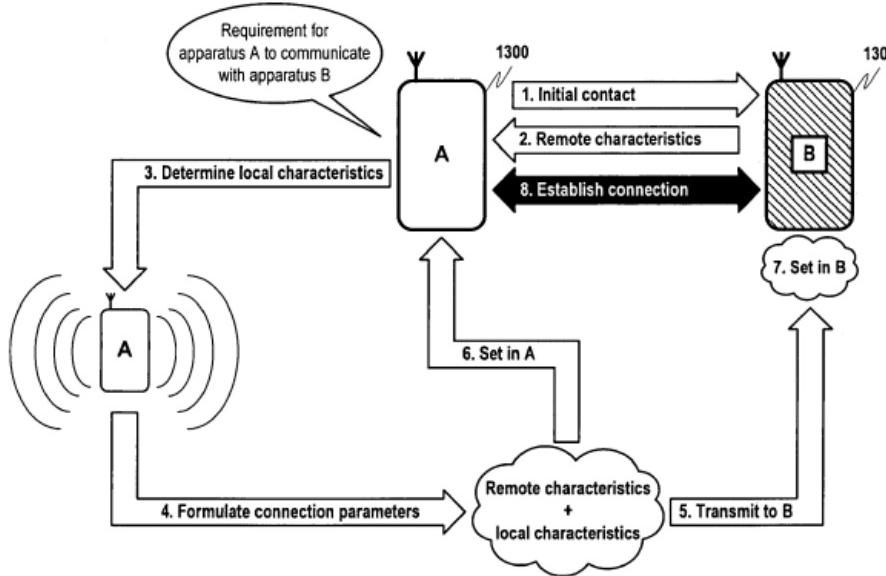
(*See* '213 patent at 19:48–20:56.) In this figure, Apparatus A has initial contact with Apparatus B ("1. Initial contact"), and requests certain remote characteristic information from Apparatus B

that is sent back to Apparatus A ("2. Remote characteristics"). (*Id.* at 19:62–20:24.) Apparatus A "may also determine [local] characteristics pertaining to itself" ("3. Determine local characteristics"). (*Id.* at 20:25–35.) Apparatus A then vaguely "formulates" a configuration to be used to connect both apparatuses ("4. Formulate connection parameters"). (*Id.* at 20:35–44.) "After formulation of the configuration is complete," the configuration is sent to Apparatus B ("5. Transmit to B"), and set in both Apparatus A and B ("6. Set in A" and "7. Set in B"). (*Id.* at 20:45–53.) "After the configuration is set … either apparatus may initiate communication" with the other and establish a connection to further communicate ("8. Establish connection") (*Id.* at 20:53–56.) How any of this is accomplished by empty box "A" or empty box "B" is never actually described or disclosed.

As further explained below, the claims and specification of the '213 patent are at a very high, generic level. They describe the alleged invention in largely vague and functional terms, and never identify any specific hardware, software, algorithms, computer program code, instructions, special-purpose processor, or other structure. The direct result of these deficiencies are the indefiniteness of the '213 patent's claim terms, which are discussed below.

A.   **Terms That Are Not Subject to 35 U.S.C. § 112, ¶ 6**

1.   **"At least one of supported communication transport configuration information for the [at least one other] apparatus, power status information for the [at least one other] apparatus, processing load information for the [at least one other] apparatus, communication load information for the [at least one other] apparatus, proximate interference information for the [at least one other] apparatus and user preferences configured in the [at least one other] apparatus" (claims 1, 8, and 22–26)**

NEC's Construction	WSOU's Construction
Plain and ordinary meaning, i.e., as a conjunctive list in which at least one of <u>each</u> information category must be present.	No construction necessary – plain and ordinary meaning (*but a disjunctive, not conjunctive, list in which only one of each information category must be present*)[9]

This term appears in every asserted claim of the '213 patent. This term recites the types

of "characteristic information" used to formulate and implement a configuration in order to

establish communication between apparatuses. The Parties dispute whether this term recites a

conjunctive or disjunctive list and thus whether the "characteristic information" must include at

least one of each information category or instead include only one type of information. At the

outset, the term comprises a list of information types (power status information, processing load

information, etc.) plus the word "and" preceding the final entry in the list. Therefore the list is

conjunctive by its own terms.

WSOU's confusion appears to arise from the preceding phrase "at least one of," but here

the Federal Circuit provides an answer: In *SuperGuide Corp. v. DirecTV Enterprises, Inc.*, 358

F.3d 870 (Fed. Cir. 2004), the Federal Circuit considered a limitation with identical grammatical

structure and held that the disputed term required at least one of ***each*** entry in the list. *See id.* at

886. In that case, the asserted claim was directed to an online television program schedule

system comprising a "first means for storing ***at least one of*** a desired program start time, a

desired program end time, a desired program service, ***and*** a desired program type." *Id.* at 884.

On appeal, plaintiff SuperGuide argued that the phrase "at least one of" required the selection

and storage of one or more of the four criteria (*i.e.*, program start time, program end time,

program service, and program type) and did not therefore require storing all four criteria. *Id.* at

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[9] NEC added the italicized parenthetical to clarify (i) what WSOU asserts is the "plain and ordinary meaning" of this term and, therefore, (ii) the nature of the dispute.

885. The Federal Circuit disagreed, holding that the phrase "at least one of," when followed by a

conjunctive "series of categories of criteria," required that "the user select ***at least one value for***

each category; that is, at least one of a desired program start time, a desired program end time, a

desired program service, and a desired program type." *Id.* at 886. The disputed term here also

recites a conjunctive series of categories or types of information to be received (or determined)

by an apparatus. Following *SuperGuide*, the proper construction requires that "characteristic

information" include information corresponding to each of the listed information categories.

Indeed, the examiner appears to have construed this term in line with *SuperGuide*, and

the claims likely would not have issued otherwise. The Notice of Allowability states:

> ***[T]he prior art of record discloses*** method and apparatus for
> establishing communication between a first communication device
> (apparatus) to a second communication device (other apparatus) in
> which the first communication device remotely receives
> information of the second communication device such ***as power
> status information, interference information, and user references***
> [sic].
>
> ***The prior art of record failed to teach or suggest the
> receiving information further comprising processing load
> information and communication load information*** of the second
> communication device (other apparatus).

(Ex. 8, at 169.) Thus, if this term were properly read to require only information of one type,

like user preferences, the examiner should have rejected the claims over the prior art disclosing

establishing communication between apparatuses wherein one apparatus receives user

preferences from the other apparatus.

The plain text of the claims connotes a conjunctive list, which *SuperGuide* affirms, and

the claims would not have issued otherwise. Accordingly, the only workable construction for

this term is as a conjunctive list requiring at least one of ***each*** information category.

2.   "Proximate interference information for the [at least one other] apparatus" (claims 1, 8, and 22–26)

NEC's Construction	WSOU's Construction
Indefinite	No construction necessary – plain and ordinary meaning

This claim term appears in every asserted claim of the '213 patent and is yet another of the types of "characteristic information" recited by the asserted claims as being used to formulate and implement a configuration in order to establish communication between apparatuses. This term is indefinite due to the word "proximate." A POSITA would understand "proximate" to be a term of degree, requiring the interference (and information about it) to be a certain distance or range from the remote device. (*See* Shoemake Decl. ¶ 134.) However, there is no accepted, plain and ordinary meaning of the word "proximate" to a POSITA, including how close the interference or interfering device must be in order for any interference to be "proximate interference." (*Id.* ¶¶ 132–34.) For this reason, and because this is a term of degree, definiteness requires the specification to provide some objective measurement or other clear guidance as to the claim scope beyond mere subjective opinion. *See, e.g.*, *Interval Licensing v. AOL, Inc.*, 766 F.3d 1364, 1370–74 (Fed. Cir. 2014); *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1246–56 (Fed. Cir. 2008); *RideApp, Inc. v. Lyft, Inc.*, 2019 WL 7834175, at *11–12 (N.D. Cal. Oct. 16, 2019), *aff'd*, 845 F. App'x 959 (Fed. Cir. 2021) (holding "wireless means of detecting the proximity of the passenger and alerting the passenger of the proximity of the vehicle" indefinite because "the specification is silent on how proximity is to be calculated").

As with other similar terms of degree, the '213 patent must provide objective guidance about how close any interference must be to qualify as "proximate interference," and for related information about it to qualify as "proximate interference information." Otherwise, the meaning of "proximate" and "proximate interference information" would be purely subjective to a

POSITA. (Shoemake Decl. ¶¶ 133–34.) In *Halliburton*, the Federal Circuit explained how a specification might resolve ambiguities where claims use functional term-of-degree language:

> For example, the ambiguity might be resolved by using a quantitative metric (e.g., numeric limitation as to a physical property) rather than a qualitative functional feature. The claim term might also be sufficiently definite if the specification provided a formula for calculating a property along with examples that meet the claim limitation and examples that do not.

514 F.3d at 1255–56. Here, however, the specification does not employ these solutions, or any others, to provide reasonable notice about the meaning of "proximate." Instead, the specification only uses "proximate" three times, each in tautological fashion, with no corresponding quantitative metric, formula for calculation, or other objective measure of how far is "proximate" or what is "proximate interference." (*See* '213 patent at, e.g., 5:45–46 (referring only to "the area proximate to the access point" without indicating how to determine this area or referring to interference), 18:64 (referring to "the environment proximate to an apparatus" without explaining the environment or how far it extends, or any reference to interference), and 20:11–13 (referring to "information regarding … environmental conditions proximate to the apparatus," again without explanation or discussion of interference); *see also* Shoemake Decl. ¶¶ 135–36.)

WSOU does not explain what is meant by "proximate" or what qualifies as "proximate interference information." Even if WSOU were to propose that "proximate" refers to the "environment" or area near the apparatus, as the specification states, that would not provide any precise scope for this term. (*See* Shoemake Decl ¶¶ 135–38.) As the Federal Circuit further explained in *Halliburton*, "[t]he fact that [the patentee] can articulate a definition supported by the specification, however, does not end the inquiry." 514 F.3d at 1251. "Even if a claim term's definition can be reduced to words, the claim is still indefinite if a person of ordinary skill in the art cannot translate the definition into meaningfully precise claim scope." *Id.*

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Because the claim term "proximate interference information" is a term of degree, and there is no objective or other definite meaning for what is "proximate" or "proximate interference" and related "information," this term is indefinite.

B.   Terms Subject to 35 U.S.C. § 112, ¶ 6

There are 11 distinct terms in claims 22 and 26 that begin with "means for" and are subject to pre-AIA 35 U.S.C. § 112, ¶ 6.[10] As a matter of law, § 112, ¶ 6 requires that these terms be construed to identify the clearly-linked, sufficient corresponding structure (or algorithm) for the claimed function—if any exists. Each of these 11 terms is governed by § 112, ¶ 6, but is indefinite for lacking clearly-linked, sufficient corresponding structure.

1.   The indefinite "means for" terms of asserted claims 22 and 26

The Parties agree that each of the following "means for" terms are subject to § 112, ¶ 6, and agree on the recited function of each of these terms. However, each of these terms is indefinite for the specification's failure to disclose clearly-linked, sufficient corresponding structure, as NEC explains below. Specifically, for each term, the specification fails to clearly link any hardware, software, algorithm, computer program code, instructions, special purpose processor, or other structure that is sufficient to perform the recited function. This is the reason that NEC asserts that every "means for" claim term discussed below is indefinite.

Because WSOU proposed corresponding structure for each of these terms, NEC's discussion focuses on why WSOU's proposed "structure/material/acts" is neither clearly linked

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[10] The Parties additionally dispute whether nearly identical claim terms in the '213 patent reciting "computer code configured to" or "the processor being configured to" are governed by § 112, ¶ 6, and as such whether there is clearly-linked, sufficient corresponding structure for these terms. These terms are not included pursuant the Court's instructions. NEC respectfully requests that the Court construe these additional terms if not mooted by the Court's construction of the terms presented herein.

to performing the specified function by the specification, nor sufficient to do so. For each

"means for" term, WSOU proposed the following structure or select portions of this structure:[11]

WSOU's Proposed Corresponding Structure
For each "means for" term in Sections VII.B(a)–(k), *infra*:   <u>Structure/material/acts:</u> For example, [apparatus A (1300) or B (1302) and certain portions of steps 1–8 of Fig. 13], <u>communications module 230 of Fig. 2, memory 330 and processor 300 of Figs. 3, 7A, 8A, 9A, or 11, software-defined radio module 1102 and software modules 1110-1118 of Fig. 12, and steps 1406-1412 of Fig. 14A</u>, and the corresponding portions of the specification at <u>6:17-30, 6:50-7:22, 8:60-9:5, 17:8-52, 18:4-60,</u> 19:62-20:4, <u>21:1-3, and 21:15-42,</u> and equivalents thereof.

The red annotation and underlining identifies specification citations that WSOU belatedly added

as part of a purported "supplement" to its proposed structure without any good cause to do so,

and weeks after the Court's P.R. 4-2 deadline. (*See* Ex. 12.)[12]

    As discussed below, WSOU's above proposed structure is not clearly-linked or sufficient

to perform any of the specified functions of these "means for" terms. Further, the Court is not

required to take upon itself WSOU's lengthy specification citations in an attempt to divine what,

if anything, from them is actually linked to performing the specified § 112, ¶ 6 function, or if it is

sufficient to do so. *Cf. Bell*, 2019 WL 3766688, at *6 (declining to "scour" plaintiff's "absurdly

overinclusive designation" to "locate, or otherwise ascertain from the blanket proffer made by

Plaintiff what structure" is disclosed). That is particularly so here where WSOU cites the same

lengthy blocks of text as structure for every § 112, ¶ 6 term (the only exception being different

parts of Fig. 13), leaving the Court (and NEC) to attempt to discern WSOU's position.

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[11] NEC consolidated WSOU's proposed structure for each of the claim terms here for brevity and ease of discussion. Further, WSOU's proposed structure for each "means for" term is substantially the same, with the exception of certain steps and text of Figure 13.

[12] Rather than burden the Court with a motion, NEC addresses WSOU's untimely supplement because it does not change that each of these § 112, ¶ 6 terms is indefinite.

(a) **"means for initiating an inquiry from the apparatus to at least one other apparatus" (claim 22)**

This phrase appears as element [22.a] of claim 22. The Parties agree that the specified function for this § 112, ¶ 6 term is "initiating an inquiry from the apparatus to at least one other apparatus." Initially – before WSOU finally conceded that each "means for" term is governed by § 112, ¶ 6 (*See* Ex. 10, at 16.)[13] – WSOU proposed the following as corresponding structure:

> Structure/material/acts: For example, apparatus A (1300) and process 1 of Fig. 13, and the corresponding portions of the specification at 19:62-20:4, and equivalents thereof.

But this is neither clearly-linked to performing the specified function, nor sufficient to do so.

The recited function is specific: ***initiating*** an inquiry from the apparatus to at least one other apparatus—not just any communication from one apparatus to another. (Shoemake Decl. ¶ 64.) WSOU identifies as corresponding structure "apparatus A and process 1 of Fig. 13." But as discussed above, Figure 13 and its Apparatus A only disclose a "black box" for what comprises Apparatus A, not any specific structure—including, no specific structure for its annotation "1. Initial contact." (*Id.* ¶¶ 63–65.) This is a purely functional description that does not disclose any structure at all to a POSITA. (*Id.*) The portion of the specification WSOU cites states:

> In this non-limiting example, apparatus A 1300 has a requirement to interact with apparatus B 1302 in FIG. 13. Such a requirement to establish communication may be initiated by, for example, applications and/or utilities executing on apparatus A 1300, user interaction with apparatus A 1300, etc. In response to this requirement, apparatus A 1300 may send a wireless inquiry to apparatus B 1302. The wireless inquiry may be sent, for example, utilizing a channel (e.g., an initialization channel) that is known to (e.g., predefined or predetermined) each apparatus.

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[13] WSOU made this concession and proposal of § 112, ¶ 6 structure on August 19—which was already 14 days after the Local P.R. 4-2 deadline, and therefore untimely. *See* Ex. 11, at 23.

('213 patent at 19:62–20:4.) But nothing in this passage discloses or clearly links any specific,

corresponding structure for performing the claimed "initiating an inquiry" function. (Shoemake

Decl. ¶ 64.) This is a functional description that does not disclose any specific hardware,

software, algorithm, computer code, instructions, steps, special-purpose processor, or other

sufficient structure for performing the specified "initiating an inquiry" function. (*Id.*) The vague

and generic recitation of "for example, applications and/or utilities" does nothing to identify

specific, clearly-linked corresponding structure to perform this function. (*See id.*) Further, the

recitation of a "channel," such as an initialization channel, also does not solve this lack of

disclosure, because that is merely a communication medium between the apparatuses—not what

"initiates an inquiry" as the claims require. (*Id.*) And, conspicuously, nothing in this passage

mentions an "inquiry" at all. Instead, all that is mentioned is initiating a "requirement" of

Apparatus A to communicate with Apparatus B. (*Id.* ¶¶ 64–65.)

Only ***four days*** before NEC's claim construction brief originally was due (and ***24 days***

after the P.R. 4-2 disclosure deadline) WSOU purported to "update" its proposed construction

for this term (and all other "means for" terms) by identifying the following additional structure:

> communications module 230 of Fig. 2, memory 330 and
> processor 300 of Figs. 3, 7A, 8A, 9A, or 11, software-defined radio
> module 1102 and software modules 1110-1118 of Fig. 12, and
> steps 1406-1412 of Fig. 14A, and the corresponding portions of the
> specification at 6:17-30, 6:50-7:22, 8:60-9:5, 17:8-52, 18:4-60,
> 21:1-3, and 21:15-42

(*See* Ex. 12.) WSOU apparently made this late disclosure having realized that its original bare

recitation from only Figure 13 does not suffice as corresponding structure. But none of these

additional portions of the specification save this claim term from indefiniteness. As NEC's

expert Dr. Shoemake explains, none of this additional proposed structure is clearly-linked or

sufficient to perform the recited "initiating" function. (Shoemake Decl. ¶¶ 66–67.) Indeed, none

of this additional proposed structure is clearly-linked or sufficient to perform *any* of the recited

"means for" functions, whether "initiating" here or the other functions discussed in Sections

VII.B.1(b)–(k), *infra*. Also, these portions of the specification only disclose black box structure

without any specific hardware, software, algorithm, computer code, instructions, steps, special-

purpose processor, or other sufficient structure for performing the claimed function. (Shoemake

Decl. ¶¶ 66–67.) As such, WSOU's eleventh-hour, kitchen sink disclosure also fails.

For these reasons, WSOU's proposed corresponding structure fails. (*See id.* ¶¶ 63–67.)

No other parts of the specification cure this failure or otherwise disclose clearly-linked, sufficient

corresponding structure to perform the recited function. (*Id.*) This term is therefore indefinite.

(b)   "means for receiving remote characteristic information into the apparatus" (claim 22)

This phrase appears as element [22.b] of claim 22. The Parties agree that the specified

function for this § 112, ¶ 6 term is "receiving remote characteristic information into the

apparatus." WSOU proposes that the corresponding structure is the same as previously

discussed in Section VII.B.1(a), *supra*, except that the structure from Figure 13 is Apparatus A

and "process 2." This structure is neither clearly-linked by the specification to performing the

specified function, nor sufficient to do so. As a result, this "means for" term is indefinite.

The recited function here is specific: *receiving remote characteristic information* into

the apparatus—not just any communication from one apparatus to another. (Shoemake Decl. ¶

69.) WSOU identifies as corresponding structure "apparatus A and process 2 of Fig. 13," but

Figure 13 and its Apparatus A only disclose a "black box," not any specific structure—including,

no specific structure for its annotation "2. Remote characteristics." (*Id.* ¶¶ 68–70.) This purely

functional description does not disclose any structure at all to a POSITA. (*Id.*) WSOU also cited

the following as corresponding structure:

> Apparatus B 1302 may acknowledge receipt of the inquiry from apparatus A 1300, and may in turn respond with one or more messages accepting the invitation to communicate and containing remote characteristics. Remote characteristics comprise information related to the apparatus with which communication is desired (e.g., apparatus B 1302), and may include information regarding apparatus status and/or environmental conditions proximate to the apparatus. For instance, apparatus status information may include apparatus communication capabilities and/or preferences, current apparatus power condition, current apparatus operational condition, current communication activity including transports active in the apparatus and a number of messages pending for each active transport, etc. Information pertaining to environmental conditions may include signals sensed in proximity to the apparatus that may potentially cause interference, communication scheduled in the apparatus, the identification of other apparatuses operating in proximity, etc. Some or all of this information may be provided in response to the inquiry of apparatus A 1300.

('213 patent at 20:4–24.) Nothing in this passage discloses or clearly links any specific, corresponding structure for performing the claimed function. (Shoemake Decl. ¶ 70.) This is a functional description that does not disclose any specific hardware, software, algorithm, computer code, instructions, steps, special-purpose processor, or other sufficient structure for performing the specified function. (*Id.*) At most, this passage states that Apparatus B may "provide[]" remote characteristic information to Apparatus A; it does not identify any specific structure for *receiving* remote characteristic information into Apparatus A. (*Id.*)

WSOU's belatedly disclosed structure from Figures 3, 7A, 8A, 9A, 11, 12, and 14A (with specification text) is neither clearly linked nor sufficient to perform the function. (*Id.* ¶¶ 71–72.) As a result, WSOU's late kitchen-sink disclosure does not save this term from indefiniteness.

For these reasons, WSOU's proposed corresponding structure fails. (*See id.* ¶¶ 68–72.) No other parts of the specification cure this failure or otherwise disclose clearly-linked, sufficient corresponding structure to perform the recited function. (*Id.*) This term is therefore indefinite.

(c) **"means for determining local characteristic information in the apparatus" (claim 22)**

This phrase appears as element [22.c] of claim 22. The Parties agree that the specified

function for this § 112, ¶ 6 term is "determining local characteristic information in the

apparatus." WSOU proposes that the corresponding structure is the same as previously

discussed in Section VII.B.1(a), *supra*, except that the structure from Figure 13 is Apparatus A

and "process 3." This structure is neither clearly-linked by the specification to performing the

specified function, nor sufficient to do so. As a result, this "means for" term is indefinite.

The recited function here is specific: ***determining*** local characteristic information in the

apparatus. (Shoemake Decl. ¶ 74.) WSOU identifies "apparatus A and process 3 of Fig. 13," but

Figure 13 and its Apparatus A only disclose a "black box," not any specific structure—including,

no specific structure for its annotation "3. Determine local characteristics." (*Id.* ¶¶ 73–75.) This

is a purely functional description that does not disclose any structure at all to a POSITA. (*Id.*)

WSOU also cited the following as corresponding structure:

> Apparatus A 1300 may also determine characteristics pertaining to
> itself, which are designated local characteristics in FIG. 13. Local
> characteristics may include all of the information discussed above
> with respect to remote characteristics, but from the perspective of
> the initiating apparatus. While local characteristics are formulated
> after remote characteristics in the example of FIG. 13, the
> determination of local characteristics is not limited to this temporal
> organization. In particular, the determination of local
> characteristics may occur before, during or after the receipt of
> remote characteristics from apparatus B 1302.

('213 patent at 20:25–35.) Nothing above discloses or clearly links specific, corresponding

structure for performing the claimed function. (Shoemake Decl. ¶ 74.) This is a functional

description that does not disclose any specific hardware, software, algorithm, computer code,

instructions, steps, special-purpose processor, or other sufficient structure for performing the

specified function. (*Id.*) The vague and generic recitation that "Apparatus A 1300 may also

determine characteristics pertaining to itself" does nothing to identify specific, clearly-linked corresponding structure to perform this function. (*Id.*) The reference to "remote characteristic information" does not solve this lack of disclosure, because that portion of the specification fails to provide structure for determining any characteristics local to Apparatus A. (*Id.*)

WSOU's belatedly disclosed structure from Figures 3, 7A, 8A, 9A, 11, 12, and 14A (with specification text) is neither clearly linked nor sufficient to perform the function. (*Id.* ¶¶ 76–77.) As a result, WSOU's late kitchen-sink disclosure does not save this term from indefiniteness.

For these reasons, WSOU's proposed corresponding structure fails. (*See id.* ¶¶ 73–77.) No other parts of the specification cure this failure or otherwise disclose clearly-linked, sufficient corresponding structure to perform the recited function. (*Id.*) This term is therefore indefinite.

(d)   **"means for formulating a configuration in the apparatus" (claim 22)**

This phrase appears as element [22.d] of claim 22. The Parties agree that the specified function for this § 112, ¶ 6 term is "formulating a configuration in the apparatus." WSOU proposes that the corresponding structure is the structure identified in Section VII.B.1(a) above, with the caveat that the portion of the structure from Figure 13 is Apparatus A and "process 4." This structure is neither clearly-linked by the specification to performing the specified function, nor sufficient to do so. As a result, this "means for" term is indefinite.

The recited function here is specific: ***formulating*** a configuration in the apparatus. (Shoemake Decl. ¶ 79.) WSOU identifies as corresponding structure "apparatus A and process 4 of Fig. 13," but Figure 13 and its Apparatus A only disclose a "black box," not any specific structure—including, no specific structure for its annotation "4. Formulate connection parameters." (*Id.* ¶¶ 78–83.) This is a purely functional description that does not disclose any structure at all to a POSITA. (*Id.*) WSOU also proposes the following specification text:

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> Once Apparatus A 1300 has both the remote and local
> characteristic information, a configuration for SDR module 1102
> may be formulated. The configuration may define a transport, or a
> list of transports (e.g., in priority order), for use in communication
> with apparatus B 1302, channel selection for each transport (e.g.,
> hopping patterns), error correction, Quality of Service (QoS)
> requirements, operational schemes (e.g., power saving, high speed,
> etc.), radio module priority (for conflict resolution), etc.

('213 patent at 20:35–44.) Nothing in this passage discloses or clearly links any specific,

corresponding structure for performing the claimed function. (Shoemake Decl. ¶ 81.) This is a

functional description that does not disclose any specific hardware, software, algorithm,

computer code, instructions, steps, special-purpose processor, or other sufficient structure for

performing the specified function. (*Id.*) The vague and generic recitation that "a configuration

for SDR module 1102 *may be formulated*" does nothing to identify specific, clearly-linked

corresponding structure to perform this function. (*Id.*) Further, this passage indicates that the

configuration is "for SDR module 1102," and therefore does not disclose that SDR module 1102

actually, itself, "formulate[s]" the configuration. (*Id.* ¶¶ 81–83.)

WSOU also identifies as corresponding structure "apparatus 1102 of Fig. 12, [and]

apparatus 1104 of Fig. 11," both of which appear to be the same "Software-Defined Radio

(SDR) Module." (*Id.*) Neither of Figures 11 nor 12 provide sufficient or clearly-linked structure

for "formulating a configuration in the apparatus." As discussed above, the configuration is "for

SDR module 1102," not that the SDR module 1102 "formulate[s] a configuration." (*Id.*) WSOU

proposes two more portions of the specification as corresponding structure, the first being:

> For example, an alternative communication configuration for
> WCD 100 is shown at 1102. In this example, the apparatus may
> incorporate at least one SDR module 1104 in lieu of one or more
> discrete hardware-based radio modules. While the flexibility of
> SDR module 1104 may provide an option of omitting some
> communication hardware from WCD100, this does not preclude
> the incorporation of one or more hardware based modules 1106.
> Implementations incorporating both SDR radio modules 1104 and

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> hardware-based modules 1106 (represented as optional in FIG. 11
> through the use of dotted lines) are possible.

('213 patent at 17:34-44.) Nothing in this passage discloses formulating a configuration based

on the local or remote characteristic information. (Shoemake Decl. ¶ 84.) Indeed, there is no

mention of "characteristic information" at all. (*Id.*) The second portion is:

> FIG. 12 explains an example of a possible implementation of a
> SDR 1102 utilizing a previously disclosed embodiment of the
> present invention.

('213 patent at 18:4-6.) Again, nothing in this one sentence discloses formulating a

configuration. (Shoemake Decl. ¶ 82.) Further, Figure 12 fails to disclose that SDR module

1102 performs this "formulating" function, much less any hardware, software, algorithms, steps,

computer program code, instructions, or other structure for doing so. (*Id.*) Figure 12 discloses

certain sub-components of the SDR module 1102, including Multiradio Access IF 1108,

"manager" modules 1110, a "flow controller" 1112, a "Unified Radio System IF" 1120, and one

or more Antennas 1126. (*Id.*) But WSOU does not identify any of them as performing the

"formulating" function, and indeed nothing in the cited portions of the specification disclose or

clearly link any of these components to "formulating a configuration in the apparatus." (*Id.*)

WSOU's belatedly disclosed portions of Figures 3, 7A, 8A, 9A, 11, 12, and 14A (with

specification text) are neither clearly linked nor sufficient to perform the function. (*Id.* ¶ 84.) As

such, WSOU's late kitchen-sink disclosure does not save this term from indefiniteness.

This complete lack of structure is exacerbated by the specification's mentions of at least

twenty one different communications protocols. (*See* '213 patent at, e.g., Fig. 3 and 7:22–8:11

(*e.g.*, GSM, WCDMA, GPRS, PCS and WiMax; etc.).) The '213 patent does not explain how to

or disclose corresponding structure for formulating a configuration for ***any*** of these

communications protocols, much less all of them. (Shoemake Decl. ¶ 85.) There is no guidance

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whatsoever about what structure performs the function of "formulating a configuration in the apparatus," particularly for these and any other communications protocols and standards. (*Id.*)

For these reasons, WSOU's proposed corresponding structure fails. (*See id.* ¶¶ 78–86.) No other parts of the specification cure this failure or otherwise disclose clearly-linked, sufficient corresponding structure to perform the recited function. (*Id.*) This term is therefore indefinite.

(e) "means for sending the configuration from the apparatus to the at least one other apparatus" (claim 22)

This phrase appears as element [22.e] of claim 22. The Parties agree that the specified function for this § 112, ¶ 6 term is "sending the configuration from the apparatus to the at least one other apparatus." WSOU proposes that the corresponding structure is the same as previously discussed in Section VII.B.1(a), *supra*, except that the structure from Figure 13 is Apparatus A and "process 5." This structure is neither clearly-linked by the specification to performing the specified function, nor sufficient to do so. As a result, this "means for" term is indefinite.

The recited function here is specific: ***sending the configuration*** from the apparatus to the at least one other apparatus—not just any communication from one apparatus to another. (Shoemake Decl. ¶ 88.) WSOU identifies as corresponding structure "apparatus A and process 5 of Fig. 13," but Figure 13 and its Apparatus A only disclose a "black box," not any specific structure—including, no specific structure for its annotation "5. Transmit to B." (*Id.* ¶¶ 87–89.) This is a purely functional description that does not disclose any structure at all to a POSITA. (*Id.*) WSOU also proposes the following specification text as corresponding structure:

> After formulation of the configuration is complete, the configuration may be sent to apparatus B 1302. In various embodiments of the present invention, the configuration may be sent to apparatus B 1302 on the initialization channel.

('213 patent at 20:45–48.) Nothing in the above discloses or clearly links any specific, corresponding structure for performing the claimed function. (Shoemake Decl, ¶ 89.) This is a

functional description that does not disclose any specific hardware, software, algorithm, computer code, instructions, steps, special-purpose processor, or other sufficient structure for performing the specified "sending the configuration" function. (*Id.*) At most, this passage states that Apparatus A may send remote characteristic information to Apparatus B, perhaps using a configuration channel, but it does not identify any specific structure that does so. (*Id.*)

WSOU's belatedly disclosed structure from Figures 3, 7A, 8A, 9A, 11, 12, and 14A (with specification text) is neither clearly linked nor sufficient to perform the function. (*Id.* ¶¶ 90–92.) As a result, WSOU's late kitchen-sink disclosure does not save this term from indefiniteness.

For these reasons, WSOU's proposed corresponding structure fails. (*See id.* ¶¶ 87–92.) No other parts of the specification cure this failure or otherwise disclose clearly-linked, sufficient corresponding structure to perform the recited function. (*Id.*) This term is therefore indefinite.

(f) "means for implementing the configuration in the apparatus" (claims 22 and 26)

This term is element [22.f] of claim 22 and element [26.e] of claim 26. The Parties agree that the specified function for this § 112, ¶ 6 term is "implementing the configuration in the apparatus." WSOU proposes that the corresponding structure is the same as discussed in Section VII.B.1(a), *supra*, except that the structure from Figure 13 is Apparatus A and "process 6." This structure is neither clearly-linked by the specification to performing the specified function, nor sufficient to do so. As a result, this "means for" term is indefinite.

The recited function here once again is specific: ***implementing the configuration*** in the apparatus. (Shoemake Decl. ¶¶ 94, 129.) WSOU identifies as corresponding structure "apparatus A and process 6 of Fig. 13," but Figure 13 and its Apparatus A only disclose a "black box," not any specific structure—including, no specific structure for its annotation "6. Set in A,"

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which is conclusory. (*Id.* ¶¶ 93–95.) This is a purely functional description that does not

disclose any structure at all to a POSITA. (*Id.*) WSOU also proposes the following text:

> Apparatus A 1300 and apparatus B 1302 may then set the
> configuration. Setting a configuration may include, for example,
> programming one or more SDR modules 1102 in each apparatus
> for establishing communication in accordance with the
> configuration.

('213 patent at 20:49–53.) Nothing here discloses or clearly links any specific, corresponding

structure for performing the claimed function. (Shoemake Decl. ¶ 95.) This is a functional

description that does not disclose any specific hardware, software, algorithm, computer code,

instructions, steps, special-purpose processor, or other sufficient structure for performing the

specified function. (*Id.*) Instead, it vaguely and generically recites that the configuration is

"set," while mentioning nothing about any structure performing the setting. (*Id.*)

WSOU's proposed construction also identifies "apparatus 1102 of Fig. 12, apparatus

1104 of Fig. 11, and . . . 17:34-44, 18:4-6." These similarly fail to disclose sufficient, clearly-

linked corresponding structure. Confusingly, WSOU relabels 1102 and 1104 of these figures as

an "apparatus," when 1102 of Figure 12 and 1104 of Figure 11 are both identified instead as a

"Software Defined Radio (SDR) Module." (*See* '213 patent at Figs. 11 and 12, 17:35–37, 18:4–

6; *see also* Shoemake Decl. ¶ 96.) These text portions of the specification state:

> For example, an alternative communication configuration for
> WCD 100 is shown at 1102 [of Figure 11]. In this example, the
> apparatus may incorporate at least one SDR module 1104 in lieu of
> one or more discrete hardware-based radio modules. While the
> flexibility of SDR module 1104 may provide an option of omitting
> some communication hardware from WCD 100, this does not
> preclude the incorporation of one or more hardware based modules
> 1106. Implementations incorporating both SDR radio modules
> 1104 and hardware-based modules 1106 (represented as optional in
> FIG. 11 through the use of dotted lines) are possible.

* * * * *

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> FIG. 12 explains an example of a possible implementation of a SDR 1102 utilizing a previously disclosed embodiment of the present invention.

Nothing in these passages discloses or clearly-links any structure—much less sufficient structure—for performing the specified function of "implementing the configuration in the apparatus." (*See* Shoemake Decl. ¶ 96.) Instead, these passages only suggest that a Software Defined Radio (SDR) is a possible component that itself can be configured by whatever performs the claimed function of "implementing the configuration"—assuming that the configuration relates to wireless radio communications. (*Id.* ¶¶ 96–97.) But this passage makes no mention of "implementing the configuration," or of any specific hardware, software, algorithm, computer code, instructions, steps, special-purpose processor, or other sufficient structure that does so. (*Id.*) The end result is that the specification provides nothing more than a functional recitation that whatever configuration was previously determined is simply implemented, without any details about or particular structure for doing so. (*Id.*)

WSOU's belatedly disclosed structure from Figures 3, 7A, 8A, 9A, 11, 12, and 14A (with specification text) is neither clearly linked nor sufficient to perform the function. *(Id.* ¶ 98.) As a result, WSOU's late kitchen-sink disclosure does not save this term from indefiniteness.

This complete lack of any structure is once again exacerbated by the specification's mentions of many different communications protocols. (*See* '213 patent at, e.g., Fig. 3 and 7:22–8:11.) The '213 patent does not explain or disclose corresponding structure for implementing a configuration for ***any*** of these technologies, much less all of them. (*See* Shoemake Decl. ¶ 99.) There is no guidance whatsoever about what structure "implement[s] the configuration in the apparatus," particularly for these communications technologies, protocols, and standards. (*Id.*)

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For these reasons, WSOU's proposed corresponding structure fails. (*See id.* ¶¶ 93–100, 129.) No other parts of the specification cure this failure or otherwise disclose clearly-linked, sufficient corresponding structure to perform the recited function. (*Id.*) This term is indefinite.

> **(g)** **"means for establishing communication [between the apparatus and at least one other apparatus] in accordance with the configuration" (claims 22 and 26)**

This phrase appears as element [22.g] of claim 22, and also as element [26.f] of claim 26. The Parties agree that the specified function for this § 112, ¶ 6 term is "establishing communication between the apparatus and at least one other apparatus in accordance with the configuration." WSOU proposes that the corresponding structure is the same as previously discussed in Section VII.B.1(a), *supra*, except that the structure from Figure 13 is Apparatus A and "process 8." This structure is neither clearly-linked to performing this function, nor sufficient to do so. The result once again is indefiniteness.

The recited function here is yet again specific: ***establishing communication*** between the apparatus and at least one other apparatus ***in accordance with the configuration***. (Shoemake Decl. ¶¶ 102, 130.) WSOU identifies as corresponding structure "apparatus A and process 8 of Fig. 13," but Figure 13 and its Apparatus A only disclose a "black box," not any specific structure—including, no specific structure for its annotation "8. Establish connection," which is conclusory. (*Id.* ¶¶ 101–03.) This is a purely functional description that does not disclose any structure at all to a POSITA. (*Id.*) WSOU also proposes the following:

> After the configuration is set in apparatus A 1300 and apparatus B 1302, either apparatus may initiate communication (e.g., establish a wireless link between apparatuses).

('213 patent at 20:53–56.) Nothing here discloses or clearly links any specific, corresponding structure for performing the claimed function. (Shoemake Decl. ¶ 103.) This is a functional description that does not disclose any specific hardware, software, algorithm, computer code,

instructions, steps, special-purpose processor, or other sufficient structure that establishes

communication between the apparatuses, or that does so in accord with the configuration that

was previously determined by Apparatus A and then received by Apparatus B. (*Id.*) Instead,

this only vaguely and generically recites that the two apparatuses can then "initiate

communication" once any configuration has been set. (*Id.*)

WSOU's belatedly disclosed structure from Figures 3, 7A, 8A, 9A, 11, 12, and 14A (with

specification text) is neither clearly linked nor sufficient to perform the function. (*Id.* ¶¶104–05.)

As a result, WSOU's late kitchen-sink disclosure does not save this term from indefiniteness.

This complete lack of any structure is once again exacerbated by the specification's

mentions many communications protocols. (*See* '213 patent at, e.g., Fig. 3 and 7:22–8:11.) The

'213 patent does not explain or disclose corresponding structure for establishing communication

in accordance with the previously-formulated and implemented configuration for ***any*** of these

communications technologies, much less all of them. (*See* Shoemake Decl. ¶ 105.) There is no

guidance whatsoever about what structure performs the recited function, particularly for these

communications technologies, protocols, and standards. (*Id.*)

For these reasons, WSOU's proposed corresponding structure fails. (*See id.* ¶¶ 101–05,

130.) No other parts of the specification cure this failure or disclose clearly-linked, sufficient

corresponding structure to perform the recited function. (*Id.*) This term is therefore indefinite.

   (h) **"means for receiving wireless communication in the apparatus"**
       (claim 26)

This phrase appears as element [26.a] of claim 26. The Parties agree that the specified

function for this § 112, ¶ 6 term is "receiving wireless communication in the apparatus." WSOU

proposes that the corresponding structure is the same as previously discussed in Section

VII.B.1(a), *supra*, except that the structure from Figure 13 is Apparatus B and "process 1."

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This structure is not clearly-linked by the specification to performing the specified function. As a result, this "means for" term is indefinite. WSOU identifies as corresponding structure "apparatus B and process 1 of Fig. 13," but Figure 13 and its Apparatus B only disclose a "black box," not any specific structure—including, no specific structure for its annotation "1. Initial contact." (*Id.* ¶¶ 107–10.) This is a purely functional description that does not disclose any clearly linked structure to a POSITA. (*Id.*) WSOU also proposes the following text:

> In response to this requirement, apparatus A 1300 may send a wireless inquiry to apparatus B 1302.
>
> * * * * *
>
> Apparatus B 1302 may acknowledge receipt of the inquiry from apparatus A 1300, and may in turn respond with one or more messages accepting the invitation to communicate and containing remote characteristics.

('213 patent at 19:64–20:4.) Nothing in this passage clearly links any specific, corresponding structure for performing the claimed function. (Shoemake Decl. ¶ 110.) This is a functional description that does not expressly identify any specific hardware, software, algorithm, computer code, instructions, steps, special-purpose processor, or other sufficient structure that receives a wireless communication in Apparatus B. (*Id.*) All that is stated is that a wireless inquiry is sent from Apparatus A to Apparatus B—not what specific structure receives this inquiry or any other wireless communication. (*Id.*) Further, the passage refers to Apparatus B responding to the inquiry, which would be *transmission* of a wireless communication, not the claimed *receiving*. (*Id.*) There is no disclosure of clearly linked, specific structure for general communications between the apparatuses, including what structure does any receiving in Apparatus B. (*Id.*)

WSOU's belatedly disclosed structure from Figures 3, 7A, 8A, 9A, 11, 12, and 14A (with specification text) is neither clearly linked nor sufficient to perform the function. (*Id.* ¶¶111–12.) As a result, WSOU's late kitchen-sink disclosure does not save this term from indefiniteness.

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For these reasons, WSOU's proposed corresponding structure fails. (*See id.* ¶¶ 107–12.) No other parts of the specification cure this failure or otherwise disclose clearly-linked, sufficient corresponding structure to perform the recited function. (*Id.*) This term is therefore indefinite.

> **(i)** **"means for if the wireless communication includes an inquiry requesting characteristic information, determining characteristic information" (claim 26)**

This phrase appears as element [26.b] of claim 26. The Parties agree that the specified function for this § 112, ¶ 6 term is "if the wireless communication includes an inquiry requesting characteristic information, determining characteristic information." This notably is a specific function, requiring first checking whether the wireless communication includes an inquiry, and only if so, then determining characteristic information. (Shoemake Decl. ¶ 115.) Further, as has already been discussed, the '213 patent's specification identifies various categories of possible "characteristic information," ('213 patent at 20:9–24), as does claim 26 following its "comprising at least one of" language, (*id.* at 28:1–7.) As a result, the specification must disclose and clearly link sufficient structure for performing this particular function.

However, the specification does not come close to doing so. Specifically, WSOU proposes that the corresponding structure is the same as previously discussed in Section VII.B.1(a), *supra*, except that the structure from Figure 13 is Apparatus B and "processes 1 and 2." This structure is neither clearly-linked by the specification to performing the specified function, nor sufficient to do so. WSOU's proposal first identifies "apparatus B and processes 1 and 2 of Fig. 13," but Figure 13 and its Apparatus B only disclose a "black box," not any specific structure—including, no specific structure for its annotation "1. Initial contact" or "2. Remote characteristics." (Shoemake Decl. ¶¶ 113–16.) This is a purely functional description that does not disclose any structure at all to a POSITA. (*Id.*) Further, these arrows in Figure 13 connote the wireless transmission of different wireless signals—not any sort of determination of

characteristic information if there is an inquiry, which is the specific function here. (*Id.*) WSOU

also proposes the following:

> In this non-limiting example, apparatus A 1300 has a requirement to interact with apparatus B 1302 in FIG. 13. Such a requirement to establish communication may be initiated by, for example, applications and/or utilities executing on apparatus A 1300, user interaction with apparatus A 1300, etc. In response to this requirement, **apparatus A 1300 may send a wireless inquiry to apparatus B 1302. The wireless inquiry may be sent, for example, utilizing a channel (e.g., an initialization channel) that is known to (e.g., predefined or predetermined) each apparatus.**
>
> <div align="center">* * * * *</div>
>
> Remote characteristics comprise information related to the apparatus with which communication is desired (e.g., apparatus B 1302), and may include information regarding apparatus status and/or environmental conditions proximate to the apparatus. For instance, apparatus status information may include apparatus communication capabilities and/or preferences, current apparatus power condition, current apparatus operational condition, current communication activity including transports active in the apparatus and a number of messages pending for each active transport, etc. Information pertaining to environmental conditions may include signals sensed in proximity to the apparatus that may potentially cause interference, communication scheduled in the apparatus, the identification of other apparatuses operating in proximity, etc. **Some or all of this information may be provided in response to the inquiry of apparatus A 1300.**

('213 patent at 19:64–20:4 and 20:8–24.) Nothing here discloses, much less clearly links,

sufficient corresponding structure for either resolving "if the wireless communication includes an

inquiry requesting characteristic information" or, if it does, "determining characteristic

information." (Shoemake Decl. ¶ 116.) This is instead, once again, a functional description that

does not disclose any specific hardware, software, algorithm, computer code, instructions, steps,

special-purpose processor, or other sufficient structure. (*Id.*) In fact, this passage makes the

structure for this "means term" even more problematic—listing many different potential types of

remote characteristics, but giving no guidance whatsoever about how to "determine"

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characteristic information about them or what that information would be. (*Id.*) As shown by the bolded portions above, all this passage says is that Apparatus A can send an inquiry to Apparatus B, which can then send "some or all" remote characteristic information back in response. (*Id.*) However, there is no disclosure or clear linking of any structure for the crucial, actual function of determining what that information is if the received communication from Apparatus A is an inquiry requesting this information from Apparatus B. (*Id.*)

WSOU's belatedly disclosed structure from Figures 3, 7A, 8A, 9A, 11, 12, and 14A (with specification text) is neither clearly linked nor sufficient to perform the function. (*Id.* ¶¶117–18.) As a result, WSOU's late kitchen-sink disclosure does not save this term from indefiniteness.

For these reasons, WSOU's proposed corresponding structure fails. (*See id.* ¶¶ 113–18.) No other parts of the specification cure this failure or otherwise disclose clearly-linked, sufficient corresponding structure to perform the recited function. (*Id.*) This term is therefore indefinite.

(j)   "means for responding to the inquiry, the response comprising the characteristic information" (claim 26)

This phrase appears as element [26.c] of claim 26. The Parties agree that the specified function for this § 112, ¶ 6 term is "responding to the inquiry, the response comprising the characteristic information." WSOU proposes that the corresponding structure is the same as previously discussed in Section VII.B.1(a), *supra*, except that the structure from Figure 13 is Apparatus B and "process 2." This structure is neither clearly-linked by the specification to performing the specified function, nor sufficient to do so. As a result, this "means for" term is indefinite. WSOU identifies as corresponding structure "apparatus B and process 2 of Fig. 13" but Figure 13 and its Apparatus B only disclose a "black box," not any specific structure— including, no specific structure for its annotation "2. Remote characteristics." (Shoemake Decl.

¶¶ 119–21.) This is a purely functional description that does not disclose any structure at all to a

POSITA. (*Id.*) WSOU also proposes the following text from the specification:

> Apparatus B 1302 may acknowledge receipt of the inquiry from
> apparatus A 1300, and may in turn respond with one or more
> messages accepting the invitation to communicate and containing
> remote characteristics.

('213 patent at 19:64–20:4.) Nothing in this single sentence discloses or clearly links any

specific, corresponding structure for performing the claimed "responding to the inquiry"

function. (Shoemake Decl. ¶ 121.) This is a functional description that does not disclose any

specific hardware, software, algorithm, computer code, instructions, steps, special-purpose

processor, or other sufficient structure of Apparatus B that responds to the inquiry from

Apparatus A, including by sending remote characteristic information back to Apparatus A. (*Id.*)

All that is stated is that a wireless signal "containing remote characteristics" may be sent

Apparatus B to Apparatus A—not what specific structure performs this response or sends this

information. (*Id.*) And, there is no clearly linked, specific structure for general wireless

communications between the apparatuses, including what structure responds or transmits a

wireless signal from Apparatus B to Apparatus A. (*Id.*)

   WSOU's belatedly disclosed structure from Figures 3, 7A, 8A, 9A, 11, 12, and 14A (with

specification text) is neither clearly linked nor sufficient to perform the function. (*Id.* ¶¶122–23.)

As a result, WSOU's late kitchen-sink disclosure does not save this term from indefiniteness.

   For these reasons, WSOU's proposed corresponding structure fails. (*See id.* ¶¶ 119–23.)

No other parts of the specification cure this failure or otherwise disclose clearly-linked, sufficient

corresponding structure to perform the recited function. (*Id.*) This term is therefore indefinite.

(k)   **"means for receiving further wireless communication in the apparatus, the further wireless communication including a configuration" (claim 26)**

This phrase appears as element [26.d] of claim 26. The Parties agree that the specified function for this § 112, ¶ 6 term is "receiving further wireless communication in the apparatus, the further wireless communication including a configuration." WSOU proposes that the corresponding structure is the same as previously discussed in Section VII.B.1(a), *supra*, except that the structure from Figure 13 is Apparatus B and "process 5." This structure is neither clearly-linked by the specification to performing the specified function, nor sufficient to do so. As a result, this "means for" term is indefinite. WSOU identifies as corresponding structure "apparatus B and process 5 of Fig. 13," but Figure 13 and its Apparatus B only disclose a "black box," not any specific structure—including, no specific structure for its annotation "5. Transmit to B." (Shoemake Decl. ¶¶ 124–26.) This is a purely functional description that does not disclose any structure at all to a POSITA. (*Id.*) WSOU also proposes the following text:

> After formulation of the configuration is complete, the configuration may be sent to apparatus B 1302. In various embodiments of the present invention, the configuration may be sent to apparatus B 1302 on the initialization channel.

('213 patent at 20:45–48.) Nothing in this passage discloses or clearly links any specific, corresponding structure for performing the claimed "receiving further wireless communication" function. (Shoemake Decl. ¶ 126.) This is a functional description that does not disclose any specific hardware, software, algorithm, computer code, instructions, steps, special-purpose processor, or other sufficient structure that receives a wireless communication in Apparatus B, including receiving a configuration as the wireless communication. (*Id.*) All that is stated is that a wireless communication is sent from Apparatus A to Apparatus B—not what specific structure receives this communication. (*Id.*) And, there is no disclosure or clearly linking of any specific

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structure for general wireless communications between the apparatuses, including what structure performs reception in Apparatus B. (*Id.*)

WSOU's belatedly disclosed structure from Figures 3, 7A, 8A, 9A, 11, 12, and 14A (with specification text) is neither clearly linked nor sufficient to perform the function. (*Id.* ¶¶127–28.) As a result, WSOU's late kitchen-sink disclosure does not save this term from indefiniteness.

For these reasons, WSOU's proposed corresponding structure fails. (*See id.* ¶¶ 124–28.) No other parts of the specification cure this failure or otherwise disclose clearly-linked, sufficient corresponding structure to perform the recited function. (*Id.*) This term is therefore indefinite.

VIII.   U.S. PATENT NO. 9,065,918 (CASE NO. 6:20-CV-927-ADA)

The Parties dispute only one term here. The '918 patent relates generally to transferring a call to a more convenient number. The problem discussed in the '918 patent is largely outdated today, and relates to the fact that 15 years ago when the '918 patent was filed (in 2006), it could be expensive for a user to make a call and talk on a mobile phone due to a limited number of minutes or high prices for roaming. (*See* '918 patent at, e.g., 1:12–25 and 1:52–67.) To avoid these "high" prices and fees and the use of voice minutes, prior art systems were developed to transfer a call on a mobile phone to a land line instead, which was free.[14] (*See id.*) The '918 patent describes some of these prior art systems in Figures 1–3 and at 1:11–3:30. Supposedly, the drawback of these prior art systems was that they required the use of a "data channel" for call control and transfer, but some networks at that time did not support a data channel. (*See id.* at 3:20–32.) The '918 patent supposedly improved over this prior art by using a voice channel

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[14] As the Court is surely aware, many people today do not have a landline at all, nor are there the same roaming or other fees for mobile phones that there were in 2006. Further, the prevalent 4G and forthcoming 5G telecommunications protocols are digital, not analog, and employ data channels for essentially all functionality, including to join a network, for call setup and signaling, for sending and receiving voice call information, and for other non-call data communications.

instead to control the transfer of the call. This difference is most easily seen by comparing prior

art Figure 3 with the Figure 4 embodiment of the alleged invention, shown side-by-side below:
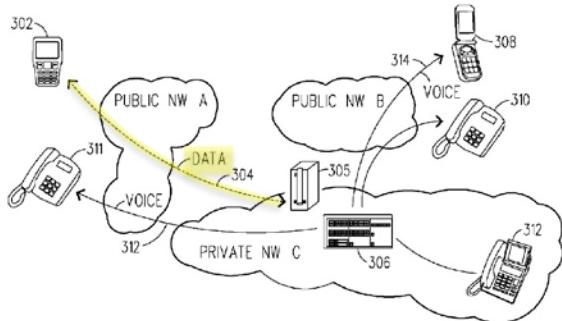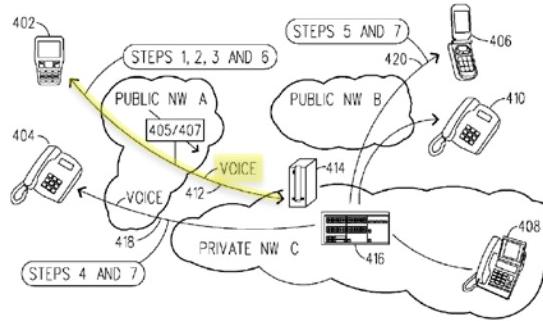
FIG. 3 (PRIOR ART)   FIG. 4

As shown above, the figures are identical except for highlighted data channel 304 and

highlighted voice channel 412. In prior art Figure 3, the voice call between convenient phone

311 and mobile phone 308 is set up by mobile phone 302 using "data channel 304." (*See id.* at

2:41–3:11). In the alleged invention (shown in Figure 4), the voice call between convenient

phone 404 and mobile phone 406 is instead set up by mobile phone 402 using voice connection

412. (*See id.* at 4:27–5:48.) Mobile phone 402 may use voice prompts and other dual tone

multiple frequency (DTMF) signaling over the voice channel during the voice call—rather than

data signaling as in the prior art—to control transfer of the call to another convenient number.

(*See id.* at 4:27–5:48.) Performing call control using the voice channel (instead of a data

channel) supposedly avoided data charges, minutes consumption, roaming fees, and other costs

that would be incurred if call control was done over a data channel as in the prior art. (*See id.* at

5:49–64; *see also id.* at 3:19–32.) "Mobile phone 402 … does not have to be a 'smart' mobile

phone ... which is capable of interacting with a data network." (*Id.* at 5:64–67.)

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A.   **"During the voice call"**

NEC's Construction	WSOU's Construction
"Over a voice connection"	No construction necessary – plain and ordinary meaning

Because the specification of the '918 patent (1) makes clear that the claimed improvement over the prior art results from transmitting call control information over a voice channel instead of a data channel and (2) discloses no embodiments having a data channel, the term "during a voice call" in claim 18 is properly construed to require that call control information be provided over a voice connection or channel.

It is true that, "[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims." *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quotation omitted). However, "when the preferred embodiment is described in the specification as the invention itself, the claims are not necessarily entitled to a scope broader than that embodiment." *Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1330 (Fed. Cir. 2009) (quoting *Chimie v. PPG Indus. Inc.*, 402 F.3d 1371, 1379 (Fed. Cir. 2005)). That is the situation here, particularly with the specification's juxtaposition and contrast between the alleged invention and the prior art.

For example, in *Secure Web Conference Corp. v. Microsoft Corp.*, 640 F. App'x 910 (Fed. Cir. 2016), the Federal Circuit affirmed the lower court's construction of the claim term "security device" to be "a ***stand-alone*** telecommunications device, ***external to and separate from*** the associated microprocessor," *id.* at 913–14, after recognizing the following:

> All descriptions of the security device in the intrinsic record are
> limited to a stand-alone device. Nothing in the intrinsic record
> suggests that the patentee intended a broader notion of a security
> device. Significantly, at no point does the specification

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> contemplate a security device embedded within a microprocessor-
> based device. To the contrary, the specification touts the separate
> and stand-alone nature of the security device as an advantage.

Id. at 914. Of particular importance was that "the specification repeatedly notes the importance

of using an external security device, reinforcing that the security device of the invention is

limited to stand-alone security devices." *Id.* at 915; *see also Toro Co. v. White Consol. Indus.*,

199 F.3d 1295, 1300–01 (Fed. Cir. 1999) (construing a claim to require a particular configuration

where the specification described the importance of the configuration and no others).

Similarly, the '918 patent discloses only embodiments using a voice channel, and "touts"

the voice channel as the advantage. *First*, the '918 specification explains the improvement of the

claimed invention over the prior art as resulting from transmitting call control information over a

voice channel instead of a data channel. *See, e.g.*, '918 Patent, 3:19–27, 5:59–64 ("Plus, ***the***

present invention is a marked improvement over the known Call Master service in that it allows

the user of the mobile phone 402 to have a third party call control feature ***without needing a data***

subscription or having to establish a data connection with a data network.").

Second, each disclosed embodiment in the specification requires that the call control

information be provided over a voice channel. *See, e.g., id.* at 4:38–44, 6:26–41, 6:56–7:6, 7:33–

57; *see also id.* at 8:7–14 ("From the foregoing, it should be appreciated that a person can use

their mobile phone to establish a voice connection with a central server, then send call control

information ***in band in the voice channel*** (via a Voice User Interface (VUI), DTMF or Multi-

Frequency (MF) signaling) to setup a call between a convenient phone (e.g., land-line phone or

mobile phone which has a better tariff structure) and a destination phone."). Accordingly, the

term "during a voice call" in claim 18 is properly construed to require that the telephone numbers

of the convenient phone and destination phone be provided over a voice connection.

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Dated: September 27, 2021   Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of this document has been

served on all counsel of record on September 27, 2021 by CM/ECF for those counsel who have

appeared in the above-captioned matters.

                                        By: */s/ Hilda C. Galvan*_____
                                             Hilda C. Galvan